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**BACTERIOCIN-METAL COMPLEXES IN THE DETECTION OF**  
**PATHOGENS AND OTHER BIOLOGICAL ANALYTES**

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**ABSTRACT OF THE DISCLOSURE**

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Complexes of bacteriocins and metals are provided that are useful in detecting bacteria, fungi and other biological analytes, and are particularly useful in detecting gram positive bacteria. The complexes are preferably chelated complexes wherein the bacteriocin is a lantibiotic, non-lanthionine containing peptide, large heat labile protein and complex bacteriocin, fusion protein thereof, mixture thereof, and fragment, homolog and variant thereof, and (b) a detectable label comprising a transition or lanthanide metal.

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The complex preferentially binds to viable gram positive or mycobacterial cells. The complex can also bind to gram negative bacteria and fungi. Methods of using the complexes in assays, diagnosis and imaging are also provided.